## REVIEW

*Trees and Shrubs of California*, by John D. Stuart and John O. Sawyer. Illustrated by Andrea J. Pickart. 2001. 467 pp. University of California Press, Berkeley. Hardcover \$45.00 ISBN 0-520-22109-5, softcover \$22.50 ISBN 0-520-22110-9.

So far, being seriously interested in woody taxa in California meant carrying a subset of the below listed publications plus The Jepson Manual to the field. Will this new guide to trees and shrubs of California replace all that? Yes, to some extent. This will be a useful book for beginners. Almost all native California trees are here and many common shrubs. Some commonly naturalized woody species are here as well. Keys are friendly, based on readily available vegetative characters. Reproductive structures are needed only exceptionally. Technical terms are kept to minimum; all of them are explained in the glossary. Nomenclature follows The Jepson Manual, with some justifiable exceptions (e.g., rehabilitation of the genus Chamaecyparis). About <sup>2</sup>/<sub>3</sub> of the included species are illustrated by line drawings. Unfortunately, some, like those of Cercis occidentalis, Genista monspessulana, or Salix gooddingii, are of rather marginal quality to say the least. Thirty nine color photographs are, in general, excellent. The distribution of 313 species in California is illustrated by small range maps. For many of the species, these are the first sketchess of distributional maps ever completed. Some more or less relevant references are listed; several really useful ones are missing (e.g., Benson and Darrow 1981; McMinn and Maino 1980; Petrides and Petrides 1992; Sampson and Jespersen 1981; Sudworth 1967).

I do not expect any complaints about coverage of California trees. Only very rare species like Lyonothamnus floribundus are missing. However, if you do not know some less common shrubs, like Forestiera pubescens, Fouquieria splendens, Lotus scoparius, Peraphyllum ramosissimum, Ribes malvaceum, or Romneya coulteri, you will be lost. They are not included. Some genera with common woody species like Amorpha, Brickellia or Penstemon are not treated at all. Nevertheless, Neviusia cliftonii is here. If you collect one of the more than 40 excluded species of Arctostaphylos, you should retreat to The Jepson Manual or, even better, to Wells' (2000) book on manzanitas. If it happens that you find Quercus palmeri, or Q. tomenlella, you will certainly be more successful with Pavlik et al. (1991) or Roberts' (1995) manuals. Stuart and Sawyer's guide, as the authors themselves admit, is clearly less useful in southern California where other sources will have to be consulted (e.g., Benson

and Darrow 1981; Conrad 1987; Elmore and Janish 1976). Several invasive woody species, even if currently not really widespread in California, could be included in a manual like this (e.g., Acacia dealbata, Alhagi pseudalhagi, Catalpa bignonioides, Cotoneaster spp., Crataegus monogyna, Elaeagnus angustifolia, Fraxinus uhdei, Ligustrum spp., Myoporum laetum, Nicotiana glauca, Sapium sebiferum, Schinus molle, Sesbania punicea). Their early detection can be critical for their successful control or eradication.

There are regions, like Great Britain, south-eastern Australia, New Zealand, or Kenya with a long tradition of excellent complete (or almost complete) field guides to trees and shrubs. Recently published Brayshaw's (1996) guide to woody species of British Columbia also belongs in this category. Stuart and Sawyer's guide is just a first step in the right direction.

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